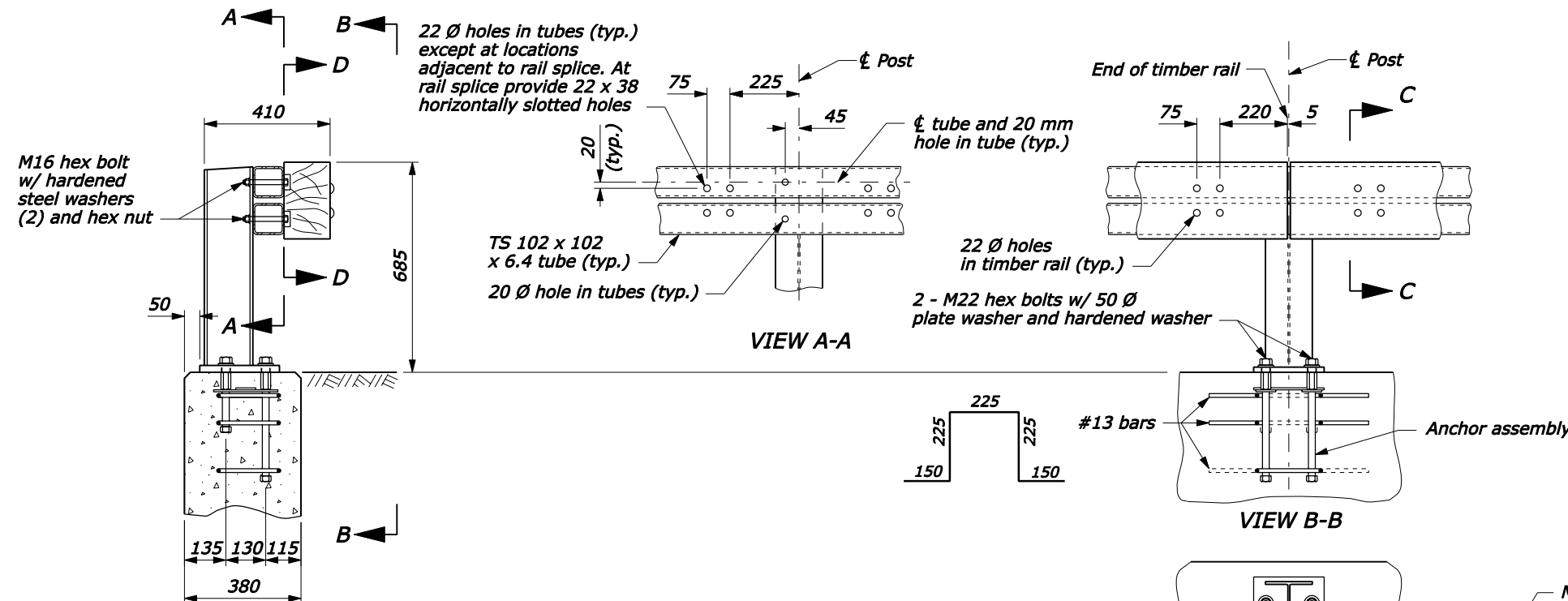


**BRIDGE RAIL ELEVATION**

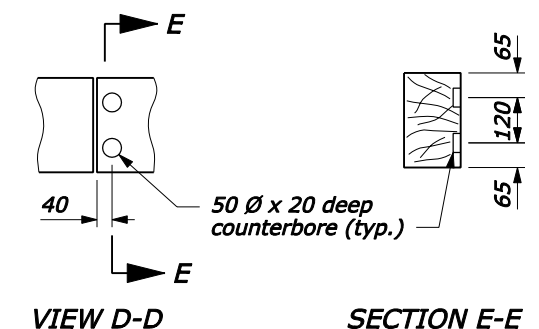
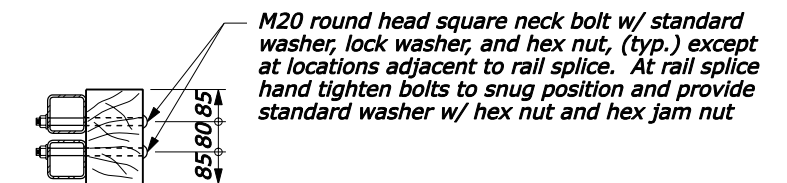


**PLAN VIEW @ POST**

**NOTE:**

1. Steel for rail posts, base plates, shims, splice sleeves, and anchor assembly plates conforms to ASTM A36. Structural tubing for rails conforms to ASTM A500, Grade B. Paint all metal components of the bridge rail except post base shims, anchor assemblies, and rail splice sleeves. Galvanize post base shims, anchor assemblies, and rail splice sleeves. Hex bolts conform to AASHTO M164 (ASTM A325). Hex coupling nuts conform to ASTM A563, Grade C, D, or DH and shall have a center stop. All other fasteners conform to ASTM A307. See Special Contract Requirements for painting.
2. Shop fabricate structural steel. Submit shop drawings to the CO for approval before fabrication. Provide drawings showing rail section lengths, splice locations, rail post spacing, and fastener lengths. Welding conforms to ANSI/AASHTO/AWS D1.5. Use a certified welder. Fabricate all steel before galvanizing or painting.
3. Section lengths of TS 102 x 102 rails shall be continuous over a minimum of three posts.
4. Provide neat cement grout consisting of a mixture of cement and water mixed to a smooth viscous paste.
5. Erect the rail parallel to grade.
6. Timber conforms to Subsection 710.08.
7. Dimensions without units are millimeters.

**FOR COMMENT**

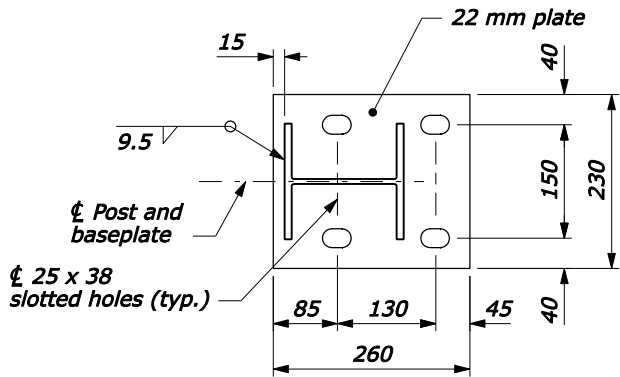


NO SCALE

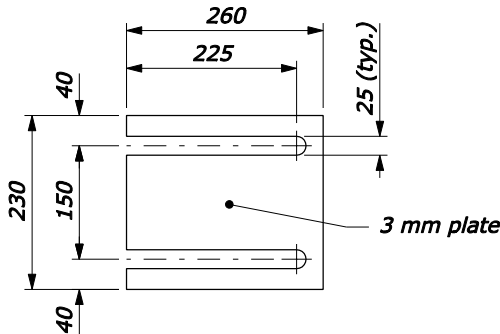
NOTE:

1. Dimensions without units are millimeters.

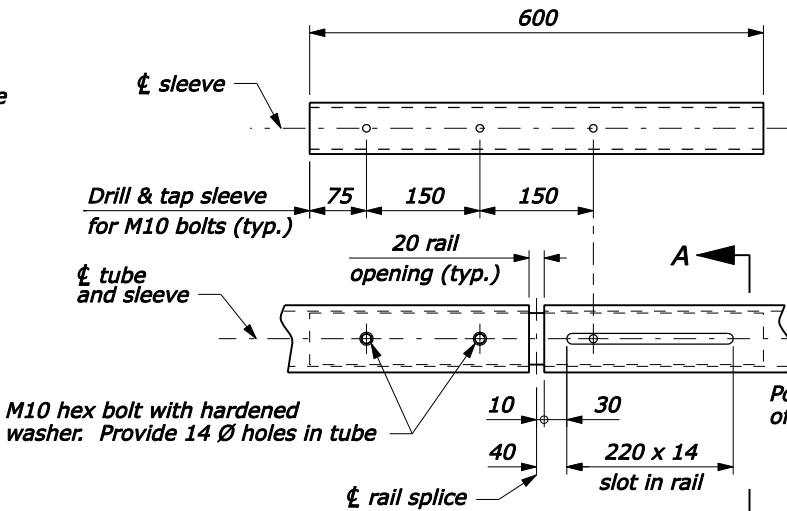
FOR COMMENT



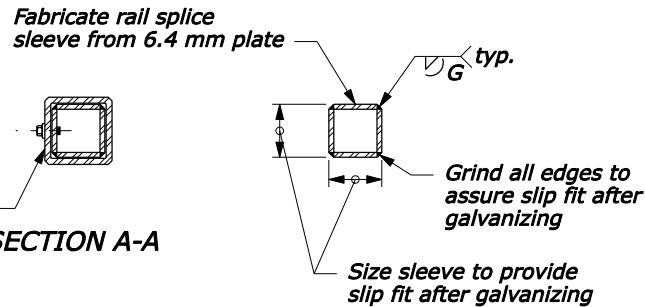
BASEPLATE DETAIL



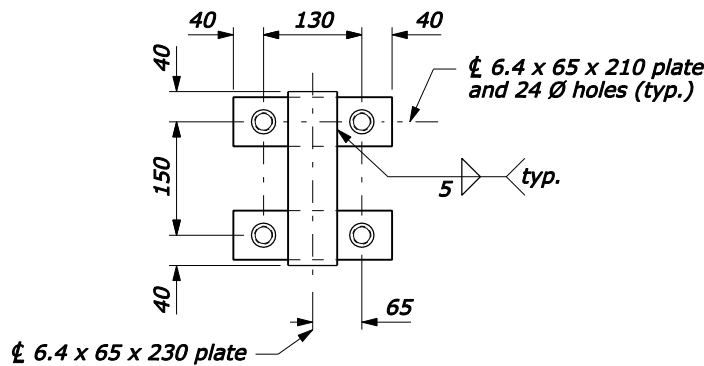
RAIL POST BASE SHIM



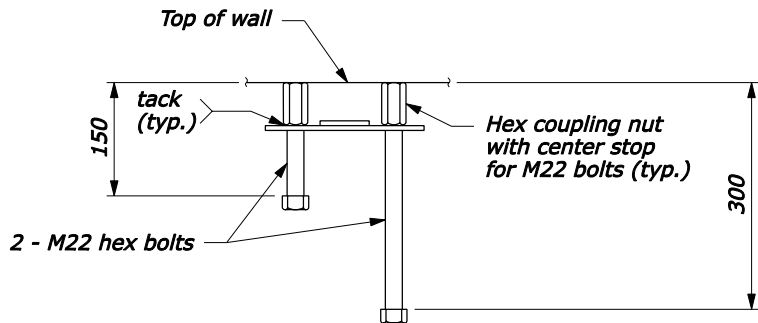
RAIL SPLICE DETAIL



SLEEVE

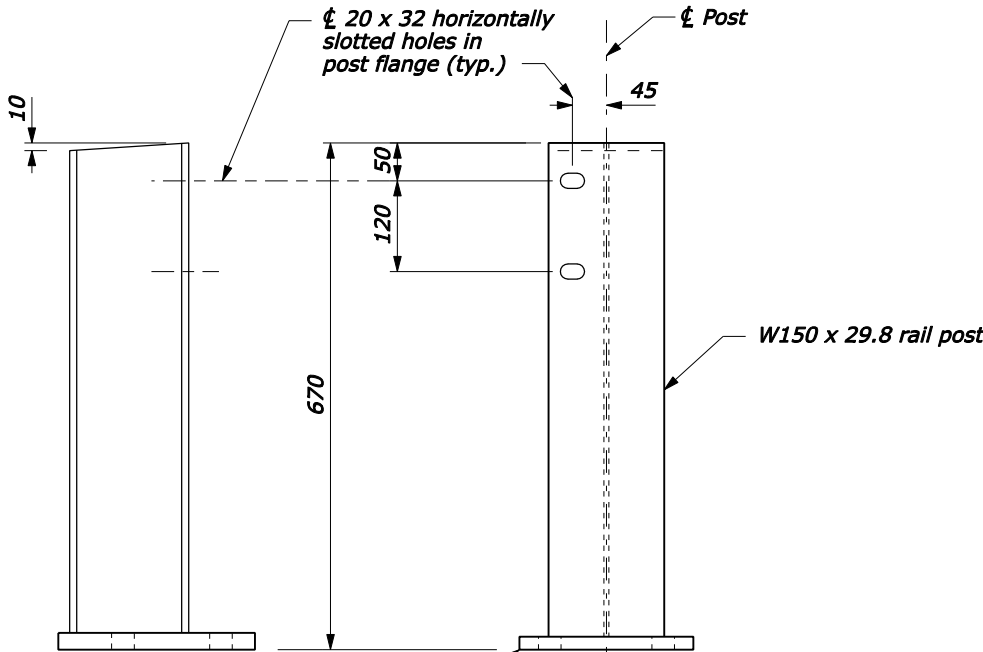


PLAN



ELEVATION

ANCHOR ASSEMBLY



POST ASSEMBLY

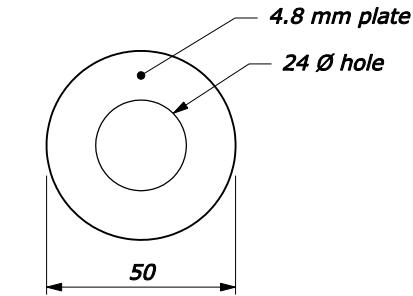
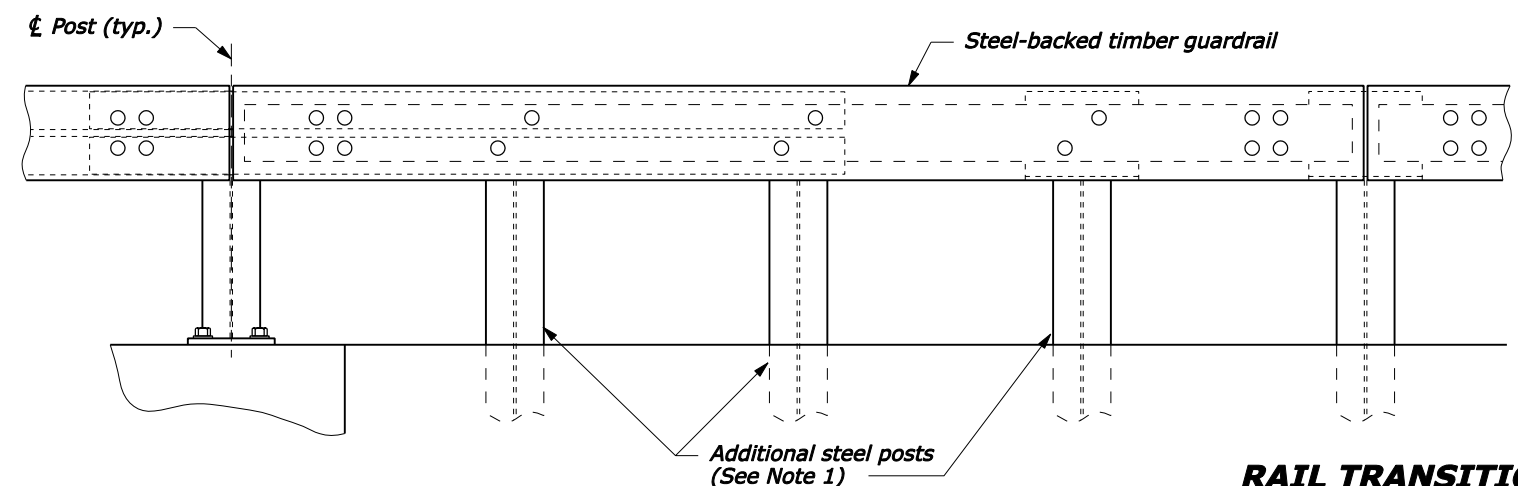


PLATE WASHER

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
METRIC STANDARD	
STEEL TUBE-BACKED TIMBER BRIDGE RAIL	
Sheet 2 of 3	
STANDARD APPROVED FOR USE --/----	STANDARD
REVISED: DRAFT: 6/2005	M617-75

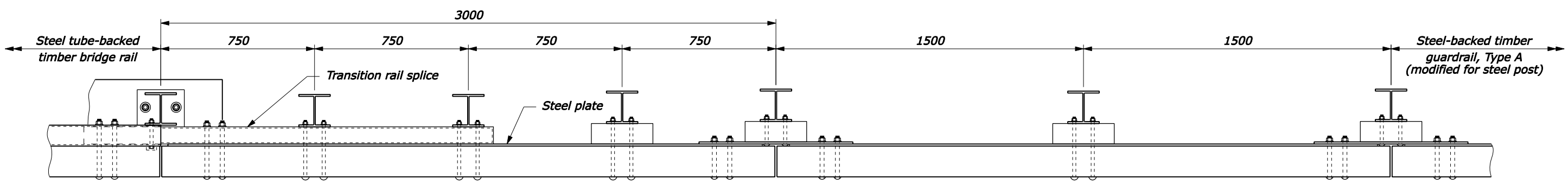


RAIL TRANSITION ELEVATION

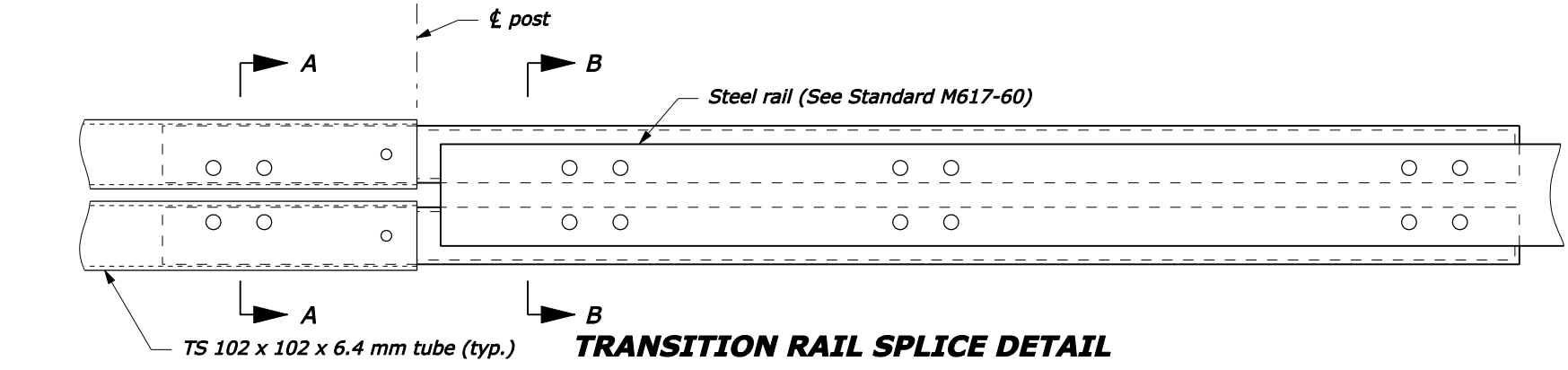
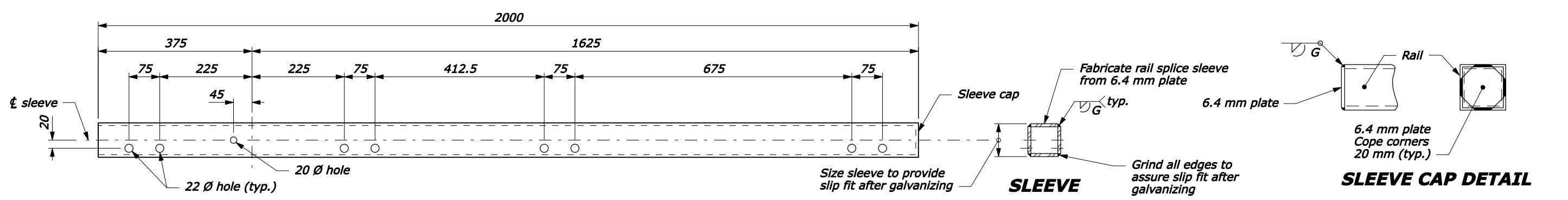
NOTE:

1. At each additional post provide 2-M16 round head square neck bolts with plate washer and hex nut, a 20 x 60 slot in steel plate, and 18 mm Ø holes in timber rail, steel post, and timber block. See Standard M617-60, Steel-backed timber guardrail, Type A (modified for steel post).
2. Dimensions without units are millimeters.

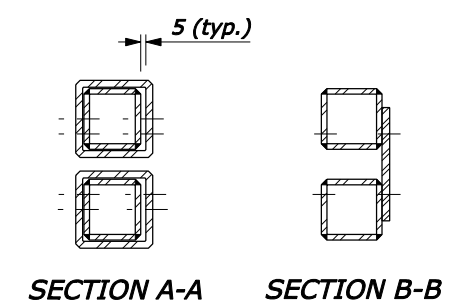
FOR COMMENT



RAIL TRANSITION PLAN



TRANSITION RAIL SPLICE DETAIL



NO SCALE